DETAILED ACTION

Drawings

1. The drawings are objected to because Figures 1, 3-5 should be labeled with proper descriptive legends such as User Datagram Protocol (UDP). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to because of the following informalities:

Add a reference to foreign priority of Germany applications 10330077.5 07/03/2003 and 10354472.0 11/21/2003 in the first sentence of the specification.

Appropriate correction is required.

Claim Objections

3. Claims 10-17 are objected to because of the following informalities:

In claim 10 line 10-11 recites “the assigned transmission protocol” which should be changed to “an assigned transmission protocol”.

In claim 10 line 12 recites “the respective queue” which should be changed to “a respective queue”.

In claim 12 lines 2-3 recites “the connectionless transport protocol” should be changed to “a connectionless transport protocol”.

In claim 13 line 2 recites “the first transmission protocol” which should be changed to “a first transmission protocol”

In claim 13 lines 2-3 recites “the second protocol” which should be changed to “a second transmission protocol”.

In claim 14 line 3 recites “the IEEE802.11 standard” which should be changed to "an IEEE802.11 standard”.

Claims 11, 15-17 are objected to because they are dependent on claim 10.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 10-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaroom (6356529) in view of Tsutsumi et al. (6907258).

For claims 10, Zaroom discloses method for controlling data transmitted via data circuits allocated to different applications in a local area network, the method comprising the steps of: receiving data in the form of data packets (see column 7 lines 50), wherein the packets are assigned to at least one of a connection-oriented transport protocol and a wireless transport protocol (see column 7 lines 50-58); managing the data packets of the connection-oriented transport protocol in a first queue (see column 9 line 50) and the data packets of the wireless transport protocol in a second queue (see column 9 line 16); wherein different priorities are assigned to the transmission protocols in the respective queue (see column 7 lines 1-10). Zaroom discloses all the subject matter but fails to mention establishing transmission times of the data packets in accordance with the assigned transmission protocol on the basis of a first prioritization. The examiner notes that since the packets are buffered based on priority, the packets are given a transmission time a broad but reasonable interpretation of transmission time in light of applicant's specification. However, Tsutsumi et al. from similar field of endeavor disclose establishing transmission times of the data packets in accordance with the assigned transmission protocol on the basis of a first prioritization (see column 8 lines 53-64). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Tsutsumi et al. transmission times and prioritization scheme into Zaroom data controlling scheme. The method can be implemented in the transmission unit. The motivation of doing this is to prioritize packets based on protocol and transmission times.

For claim 11, Zaroom discloses all the subject matter but fails to mention wherein the transmission times are established on the basis of a second prioritization such that the data packets are prioritized according to their assignment to applications. However, Tsutsumi et al. from similar field of endeavor disclose establishing wherein the transmission times are established on the basis of a second prioritization (see column 8 lines 53-64), wherein the such that the data packets are prioritized according to their assignment to applications (see column 8 lines 1-3). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Tsutsumi et al. transmission times and prioritization scheme into Zaroom data controlling scheme. The method can be implemented in the transmission unit. The motivation of doing this is to prioritize packets based on application and transmission times.

For claim 12, Zaroom discloses wherein, the connection-oriented transport protocol performs a TCP function and the connectionless transport protocol performs a UDP function (see column 7 lines 35-44).

For claim 14, Zaroom disclose all the subject matter but fails to mention wherein the local area network functions as a wireless local area network (WLAN) in conformance with the IEEE 802.11 standard. However, Tsutsumi et al. from a similar field of endeavor disclose wherein the local area network functions as a wireless local area network (WLAN) in conformance with the IEEE 802.11 standard (see column 8 lines 63-64). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to includeTsutsumi et al. wireless IEEE 802.11 standards

scheme into Zaroom data flow scheme. The method can be implemented in the Hardware. The motivation of doing this is to follow industry wide standard for a wireless network.

For claim 15, Zaroom discloses wherein the establishment of transmission times is controlled by at least one wireless access point (WAP) of the local area network (see column 7 lines 57-58).

For claim 16, Zaroom et al. disclose all the subject matter but fails to mention wherein the establishment of transmission times is controlled locally by stations of the local area network. However, Tsutsumi et al. from a similar field of endeavor disclose wherein the establishment of transmission times is controlled locally by stations of the local area network (see Figure 11 (206); see column 8 lines 33-64).

8. Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zaroom in view of Tsutsumi et al. as applied to claim 10 and 12 above, and further in view of Dirschedl et al. (6922401).

For claim 13, Zaroom and Tstsumi et al. disclose all the subject matter but fails to mention wherein a lower priority is assigned to the first transmission protocol as compared to the second protocol. However, Dirschedl et al. from a similar field of endeavor disclose wherein a lower priority is assigned to the first transmission protocol as compared to the second protocol (see column 3 lines 5-13). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Bahl et al. wireless protocol prioritization scheme into Zaroom and Tstsumi et al. data

flow scheme. The method can be implemented in the prioritization scheme. The motivation of doing this is to differentiate between high and low priority data.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zaroom in view of Tsutsumi et al. as applied to claim 10 above, and further in view Haumont et al. (7023825).

For claim 17, Zaroom and Tsutsumi et al. disclose all the subject matter but fail to mention wherein the establishment of transmission times is carried out on the basis of information in an IP priority field. However, Haumont et al. from a similar field of endeavor disclose wherein the establishment of transmission times is carried out on the basis of information in an IP priority field (see column 8 lines 59-66). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Haumont al. wireless access point scheme into Zaroom and Tsutsumi et al. data traffic scheme. The method can be implemented in the header field. The motivation of doing this is to provide improved quality of service in mobile communication.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bauchot (5970062) and Gleeson et al. (5627829).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ANWAR whose telephone number is (571)270-5641. The examiner can normally be reached on Monday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ferris W. Derrick can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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